

# **EXHIBIT 15**



United States Department of Agriculture

Exhibit  
Cox 1

## Agricultural Marketing Service

Through comprehensive market surveys, case studies, and research partnerships, AMS provides insight into direct-marketing trends and emerging food system models.

# A User's Guide to USDA's LMR Hog Price Reports

## Hog Price Reporting Under LMR

Livestock Mandatory Reporting (LMR) provides all market participants with the same open and transparent data for slaughter cattle, swine, sheep, boxed beef, lamb, and wholesale pork. LMR encourages competition in the marketplace by vastly improving price and supply information, bringing transparency, breadth, and depth to market reporting.

Federally inspected packing plants that annually process an average of 100,000 barrows and gilts or companies that process 200,000 sows and boars are

required to report information to AMS. LMR swine reports are based on two data sets provided by packers that meet reporting thresholds – purchase data and slaughter data.

**Purchase data** represents hogs that are purchased during a specified time period. Data include base prices for carcass-purchased hogs, and net prices and hog weights for any live hogs purchased.

**Slaughter data** represents hogs that are harvested during a specified time period. Data include base prices, net prices, carcass weights, and carcass characteristics. Only reports

HG201, HG213, HG214, and HG215 are based on slaughter data. All others reports are based on purchase data.

Currently, 21 packers report swine information under LMR, accounting for 97 percent of swine sales and production in the United States. AMS Market Reporters review between 7,000-11,000 swine data records on a daily basis. This data is used to publish 20 daily and 2 weekly swine reports. A listing of the reports can be found in the green box below.

## Key LMR Definitions

An important aspect of any law or administrative rule is the

definitions of various terms.

Some of the key terms and definitions for LMR for hogs are:

### PRICES:

- **Base price:** The price paid for livestock, delivered at the packing plant, before application of any premiums or discounts, expressed in dollars per hundred pounds of hot carcass weight.
- **Formula price:** A price determined by a mathematical formula under which the price established for a specified market serves as the basis for the formula.
- **Net price:** Total amount paid by a packer to a producer

AMS publishes 20 daily and 2 weekly (a total of 102) swine reports each week. The reports cover time periods, regions, and activities. The reports, which can be found at [www.ams.usda.gov/market-news/swine-direct-reports](http://www.ams.usda.gov/market-news/swine-direct-reports), are:

### The morning reports represent hogs purchased between 1:30PM yesterday and 9:30AM today:

- Daily Direct Hog–Morning ([LM HG 202](#))
- Eastern Cornbelt Daily Direct Hog–Morning ([LM HG209](#))
- IA-MN Daily Direct Hog–Morning ([LM HG 205](#))
- Western Cornbelt Daily Direct Hog–Morning ([LM HG 211](#))

### The afternoon reports represent hogs purchased between 1:30PM yesterday and 1:30PM today:

- Daily Direct Hog–Afternoon ([LM HG203](#))
- Eastern Cornbelt Daily Direct Hog–Afternoon ([LM HG210](#))
- IA-MN Daily Direct Hog–Afternoon ([LM HG 206](#))
- Western Cornbelt Daily Direct Hog–Afternoon ([LM HG 212](#))

### The slaughter and prior day purchase reports represent hogs purchased between 12AM yesterday to 12AM today:

- Daily Direct Hog Prior Day–Purchased Swine ([LM HG200](#))
- Daily Direct Prior Day Sow and Boar–Purchased Swine ([LM HG230](#))
- Daily Direct Hog Prior Day Sow Price Comparison ([NW LS832](#))
- Daily Direct Hog Prior Day Slaughtered Swine ([LM HG201](#))
- Daily Lean Hog Carcass Slaughter Cost ([LM HG213](#))
- Daily Direct Hog Prior Day Net Price Distribution ([LM HG215](#))
- Weekly National Direct Swine Report ([LM HG214](#))
- Direct Swine Non-Carcass ([LM HG250](#))
- Eastern Cornbelt Daily Direct Prior Day Hog–Purchased Swine ([LM HG207](#))
- Eastern Cornbelt Daily Direct Prior Day Sow & Boar–Purchased Swine ([LM HG232](#))
- IA-MN Daily Direct Prior Day Hog–Purchased Swine ([LM HG204](#))
- IA-MN Daily Direct Prior Day Sow & Boar–Purchased Swine ([LM HG231](#))
- Western Cornbelt Daily Direct Prior Day Hog–Purchased Swine ([LM HG208](#))
- Western Cornbelt Daily Direct Prior Day Sow & Boar–Purchased Swine ([LM HG233](#))



(including all premiums, less all discounts) per hundred pounds of carcass weight of swine delivered at the plant. Total amount paid shall include any sum deducted from the price (per hundredweight) paid to a producer that reflects the repayment of a balance owed by the producer to the packer or the accumulation of a balance to later be repaid by the packer to the producer. The total amount paid shall exclude any sum earlier paid to a producer that must be repaid to the packer.

#### **PURCHASE TYPE:**

- **Negotiated purchase:**  
A cash or spot market purchase by a packer of livestock from a producer under which the base price for the livestock is determined by seller-buyer interaction and agreement on a delivery day. The livestock must be scheduled for delivery to the packer not more than 14 days after the date on which the livestock are committed to the packer.
- **Negotiated formula purchase:**  
A swine or pork market formula purchase under which the formula is determined by negotiation on a lot-by-lot basis and the swine are scheduled for delivery to the packer not later than 14 days after the date on which the formula is negotiated and swine are committed to the packer.
- **Swine or pork market formula purchase:** A purchase of swine by a packer in which the pricing mechanism is a formula price based on a market for swine, pork, or a pork product, other than a

or options contract for swine, pork, or a pork product.

- **Other market formula purchase:** A purchase of swine by a packer in which the pricing mechanism is a formula price based on any market other than the market for swine, pork, or a pork product. This includes a formula purchase in a case which the price formula is based on one or more futures or options contracts.
- **Other purchase arrangement:** A purchase of swine by a packer that is not a negotiated purchase, swine or pork market formula purchase, negotiated formula purchase, or other market formula purchase; and does not involve packer-owned swine.

#### **ENTITIES/SELLERS:**

- **Person:** Any individual, group of individuals, partnership, corporation, association, or other entity.
- **Packer:** Any person engaged in the business of buying swine in commerce for purposes of slaughter, of manufacturing or preparing meats or meat food products from swine for sale or shipment in commerce, or of marketing meats or meat food products from swine in an unmanufactured form acting as a wholesale broker, dealer, or distributor in commerce. For any calendar year, the term "packer" includes only a federally inspected swine processing plant that slaughtered an average of 100,000 head of swine per year during the immediately preceding 5 calendar years and a person (see definition above) that slaughtered an average

of 200,000 head of sows, boars, or combination thereof per year during the immediately preceding 5 calendar years. Additionally, in the case of a swine processing plant or person that did not slaughter swine during the immediately preceding 5 calendar years, it shall be considered a packer if the Secretary determines the processing plant or person should be considered a packer after considering its capacity.

- **Affiliate:** With respect to a packer, means: (1) A person that directly or indirectly owns, controls, or holds with power to vote, 5 percent or more of the outstanding voting securities of the packer; (2) A person 5 percent or more of whose outstanding voting securities are directly or indirectly owned, controlled, or held with power to vote, by the packer; and (3) A person that directly or indirectly controls, or is controlled by or under common control with, the packer.
- **Packer-owned swine:** Swine that a packer (including a subsidiary or affiliate of the packer) owns for at least 14 days immediately before slaughter.
- **Packer-sold swine:** Swine that are owned by a packer (including a subsidiary or affiliate of the packer) for more than 14 days immediately before sale for slaughter; and sold for slaughter to another packer.

#### **OTHERS:**

- **Lot:** When used in reference to livestock, the term means a group of one or more

livestock that is identified for the purpose of a single transaction between a buyer and a seller.

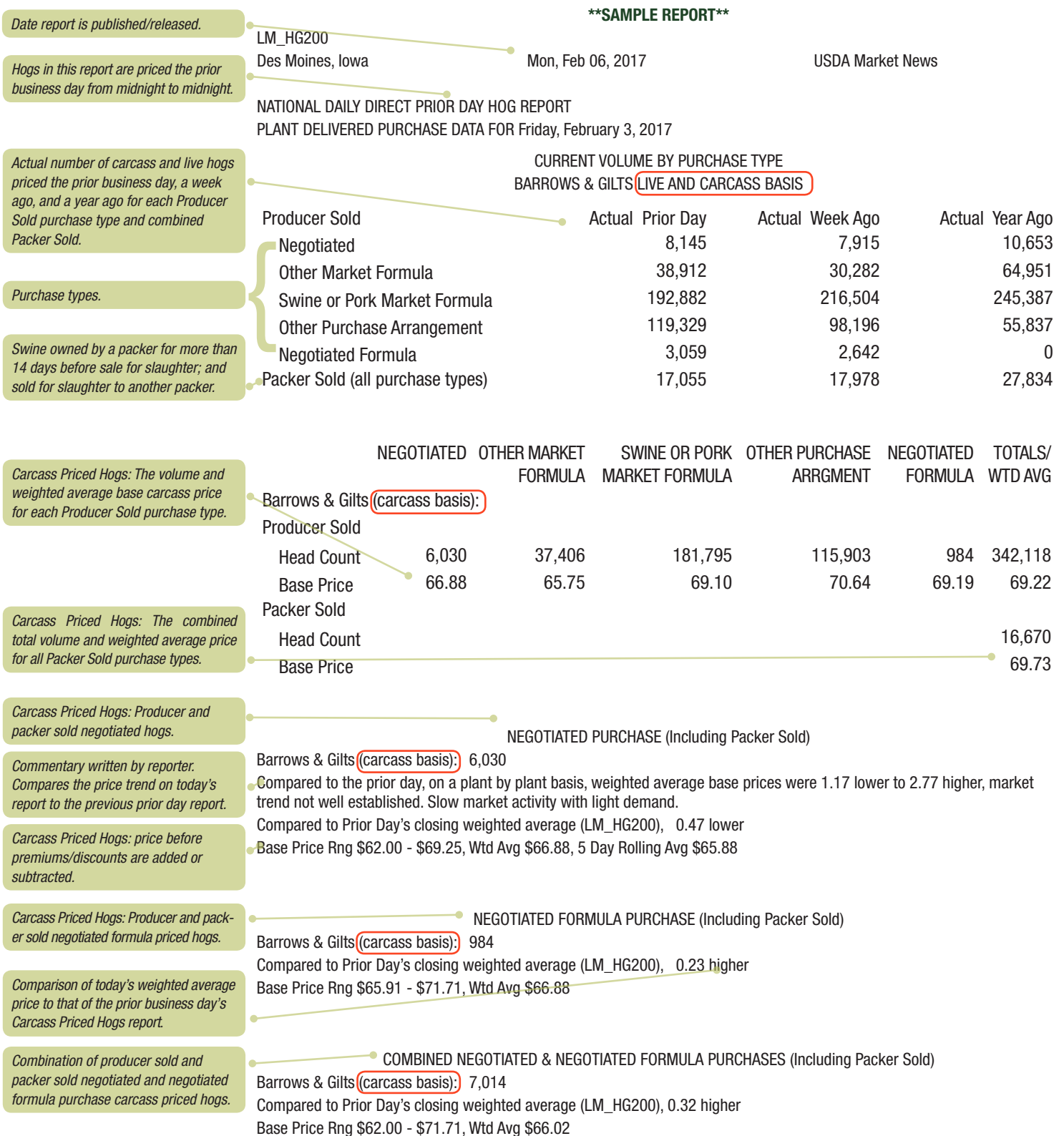
- **Base market hog:** A barrow or gilt for which no discounts are subtracted from and no premiums are added to the base price.
- **Noncarcass merit premium:** Increase in the base price of the swine offered by an individual packer or packing plant, based on any factor other than the characteristics of the carcass, if the actual amount of the premium is known before the sale and delivery of the swine.

#### **LMR Report Content**

Figures 1 and 2 show examples, along with helpful explanations, of the *Daily Direct Hog Prior Day Purchased Swine* report and the *Daily Direct Hog Prior Day Slaughtered Swine* report.



## FIGURE 1: EXAMPLE OF LM-HG200, DAILY DIRECT HOG PRIOR DAY-PURCHASED SWINE





*Carcass-Priced Hog prices from packers whose buying programs include both loin eye and back fat are included in this section.*

**NATIONAL DAILY DIRECT NEGOTIATED HOG PURCHASE MATRIX**  
**REPRESENTING INDIVIDUAL PACKER CARCASS MERIT BUYING PROGRAMS**  
 based on both Fat and Muscle Measurements for a 200 lb Carcass Basis

**LOIN AREA/DEPTH (INCHES)**

Loin area and loin depth in inches.	BF	4.0/ 1.4	5.0/ 1.7	6.0/ 2.0	7.0/ 2.3	8.0/ 2.7					
Back fat depth in inches.	0.4	65.00	72.25	66.50	73.75	67.50	73.75	68.50	75.25	69.00	76.01
	0.5	62.00	70.75	65.00	72.25	67.50	72.79	68.00	74.17	69.00	76.01
	0.6	62.00	70.75	65.00	70.75	66.50	72.25	67.50	72.86	68.50	74.70
Lowest and highest possible carcass price for each backfat-loin area/depth combination using the current report's negotiated carcass price and a 200 lbs. carcass hog.	0.7	62.00	69.25	62.00	69.25	65.00	70.75	66.50	72.50	68.00	73.38
	0.8	61.00	68.25	62.00	69.25	65.00	70.00	65.00	71.50	66.50	73.00
	0.9	61.00	66.25	62.00	68.25	62.00	68.25	65.00	70.00	65.00	72.50
	1.0	59.00	66.25	61.00	66.25	62.00	67.00	64.00	70.00	65.00	71.50
	1.1	58.00	64.25	60.00	66.00	62.00	67.00	62.00	67.00	64.00	71.50
Carcass-Priced Hogs: the lowest and highest price adjustment for each weight across all packers' buying programs.	1.2	58.00	63.00	58.00	64.00	60.00	66.00	60.00	67.00	62.00	70.00
	1.4	51.35	59.50	52.73	63.00	54.10	64.00	55.48	66.00	57.32	67.00

*Carcass-Priced Hogs: the lowest and highest price adjustment for each weight across all packers' buying programs.*

**CARCASS WEIGHT DIFFERENTIALS**

145#	-30.00	-6.56	175#	-3.00	2.25	205#	-5.25	4.50
155#	-30.00	0.00	185#	0.00	4.00	215#	-5.25	4.25
165#	-15.00	0.00	195#	-1.31	4.50	225#	-5.25	1.00

*Carcass-Priced Hogs: 5-day rolling average of all hog carcass measurements and range of base price data submitted.*

**MEASUREMENTS BASED ON SLAUGHTER DATA SUBMITTED**

5-Day Rolling Average Market Hog: 201.10 lb carcass, 0.65 inch back-fat, 7.05 square inch loin/2.35 inch loin depth, FFLI: 52.92%  
 Price Range \$66.50 - \$72.50

*The Fat Free Lean Index (FFLI) is an estimate of the amount of muscle tissue in a carcass.*

*Carcass-Priced Hogs: Producer and packer sold swine or pork market formula hogs.*

**SWINE OR PORK MARKET FORMULA PURCHASE (Including Packer Sold)**

Barrows & Gilts (carcass basis): 192,048  
 Base Price Range \$63.92 - \$80.83, Weighted Average \$69.12

*Live-Priced Hogs: Producer and packer sold negotiated purchase hogs.*

**NEGOTIATED PURCHASE (Including Packer Sold)**

Barrows & Gilts (live basis, 240-320 lbs): 1,813  
 Compared to Prior Day's closing weighted average (LM\_HG200), 1.43 higher Price Rng \$48.00 - \$55.00, Wtd Avg \$52.05, 5 Day Rolling Avg \$50.18

*Live-Priced Hogs: Producer and packer sold negotiated formula purchase hogs.*

**NEGOTIATED FORMULA PURCHASE (Including Packer Sold)**

Barrows & Gilts (live basis, 240-320 lbs): 1,961  
 \*Price not reported due to confidentiality\* 5 Day Rolling Avg \$--

*Live-Priced Hogs: Producer and packer sold combined negotiated and negotiated formula purchase hogs.*

**COMBINED NEGOTIATED AND NEGOTIATED FORMULA PURCHASES (Including Packer Sold)**

Barrows & Gilts (live basis, 240-320 lbs): 3,774  
 \*Price not reported due to confidentiality\* 5 Day Rolling Avg \$--

*Origin of hogs. The state where hogs were fed to slaughter weight. Volume includes all purchases.*

**BARROWS & GILTS PURCHASE BY STATE OF ORIGIN**

Canada	442	Colorado	340
Georgia	172	Iowa	186,583
Illinois	21,565	Indiana	19,840
Kansas	3,356	Kentucky	3,980
Michigan	6,172	Minnesota	57,685
Missouri	3,336	Mississippi	278
Montana	197	North Carolina	16,630
Nebraska	22,577	Ohio	15,030
Oklahoma	2,699	Pennsylvania	3,695
South Carolina	340	South Dakota	10,960
Tennessee	1,281	Utah	467
Wisconsin	1,757		

\*Price not reported due to confidentiality. For more information visit: [www.ams.usda.gov/sites/default/files/media/ConfidentialityGuidelines.pdf](http://www.ams.usda.gov/sites/default/files/media/ConfidentialityGuidelines.pdf)

\*Base Price is the price from which no discounts are subtracted and no premiums are added.

Source: USDA Livestock, Poultry & Grain Market News Division, Des Moines, IA

515-284-4460 email: [desm.lpgmn@ams.usda.gov](mailto:desm.lpgmn@ams.usda.gov) 24 Hour recorded market information 515-284-4830

[www.ams.usda.gov/market-news/livestock-poultry-grain](http://www.ams.usda.gov/market-news/livestock-poultry-grain)







Average hog measurements of all hogs slaughtered on the previous day.

MEASUREMENTS BASED ON SLAUGHTER DATA REPORTED:

Prior Slaughter Day's Average Market Hog based on reported slaughter data:

213.26 lbs carcass; BF 0.68; LD 2.59; LEA 7.80; FFLI 53.10%

The Fat Free Lean Index (FFLI) is an estimate of the amount of muscle tissue in a carcass.

CARCASS-BASED PURCHASES:

Wtd Avg Base	\$58.09
Wtd Avg Net Price	\$60.10

Average carcass base price and net price for all producer and packer sold purchase types from the prior day slaughter.

SWINE SCHEDULED FOR DELIVERY TO PACKING PLANTS FOR SLAUGHTER

(Dates based on reporting days)	Head Count
December 30, 2016	397,957
December 31, 2016	229,013
January 01, 2017	156
January 02, 2017	53,772
January 03, 2017	349,733
January 04, 2017	346,961
January 05, 2017	347,699
January 06, 2017	362,467
January 07, 2017	261,390
January 08, 2017	17,623
January 09, 2017	92,179
January 10, 2017	98,970
January 11, 2017	97,284
January 12, 2017	95,043

Swine scheduled for delivery to packers during the next 14 days as estimated from packer-submitted purchase data.

Total producer-sold negotiated and negotiated formula hogs.

	NEGOTIATED	NEGOTIATED FORMULA	COMBINED
Producer Sold:			
HEAD COUNT	8,556	2,243	10,799
CARCASS BASE PRICE	51.81	51.81	51.81
AVERAGE NET PRICE	52.63	52.63	52.63
LOWEST NET LOT	39.79	39.79	39.79
HIGHEST NET LOT	59.24	59.24	59.24
AVERAGE LIVE WT	263.00	268.21	264.08
AVERAGE CARCASS WT	200.42	200.76	200.49
AVERAGE SORT LOSS	-2.01	-1.96	-2.00
AVERAGE BACKFAT	0.72	0.72	0.72
AVG LOIN DEPTH (LD)	2.24	2.25	2.24
LEA (LD Converted)	6.72	9.75	7.35
AVERAGE LEAN PERCENT	53.85	53.94	53.87
(Packer Buying Programs)			

Source: USDA Livestock, Poultry & Grain Market News Division, Des Moines, IA  
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